CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2008-XXXX

WASTE DISCHARGE REQUIREMENTS
FOR
ANTLERS RESORT AND MARINA INCORPORATED
DBA ANTLERS RESORT AND MARINA
AND
U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE
SHASTA COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board), finds that:

- 1. Waste Discharge Requirements (WDRs) Order No. 97-255, adopted by the Regional Water Board on 5 December 1997, prescribes requirements for the discharge of domestic sewage from Antlers Resort and Marina (Antlers) to a septic tank leachfield system.
- 2. Antlers Resort and Marina Incorporated owns and operates Antlers in accordance with a special use permit from the U.S. Department of Agriculture Forest Service who administers the property (Assessors Parcel No. 083-130-001) for the public. Antlers Resort and Marina Incorporated and U.S. Department of Agriculture Forest Service (Forest Service) are hereafter referred to as Discharger.
- 3. Antlers Resort and Marina Incorporated submitted an Application/Report of Waste Discharge (ROWD), dated 28 February 2008, requesting revised WDRs for an additional non-conventional on-site sewage disposal system at Antlers.
- 4. Antlers is located in Section 18, T35N, R4W, MDB&M (Hanland Peak USGS Quadrangle), as shown on Attachment A, which is incorporated herein and made part of this Order, but may relocated to Section 26, T35N, R4W, MDB&M of the Sugarloaf area during receding lake levels. The site topography is relatively steep and sloping toward Shasta Lake; the surrounding area is undeveloped.
- 5. Fluctuating quantities of domestic sewage are generated from houseboat pump outs and a floating restroom, into a portable trailer-mounted holding tank. Currently, the majority of the wastewater is trucked to a local septage disposal facility and a small volume is disposed into the existing onsite septage disposal system. Domestic wastes, generated from rental cabins, public restrooms, private residences, lodge, and office/store/maintenance building are discharged to a separate on-site septic tank with two leachfield systems. Backwash water, generated from the pool and spa, also discharges to a separate leachfield system. When the marina relocates, during low water conditions, the houseboat sewage wastes are discharged into an aboveground holding tank prior to removal by a commercial transporter.

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- 6. In 2000, a survey of Shasta Lake marinas found that a variety of deodorizing chemicals are used in commercial houseboat sewage holding tanks with chemical constituents that may include but are not limited to, ammonium nitrate, calcium nitrate, n-alkyl dimethyl benzyl ammonium chloride, n-alkyl dimethyl benzyl ethyl ammonium chloride, formaldehyde, alkoxylated linear primary alcohol, gluteraldehyde, methanol, and ethoxylated nonylphenol. The amount of deodorizing chemicals used in sewage holding tanks of private houseboats, cabin cruisers, and small portable toilets are unknown.
- 7. On 6 September 2001, the Regional Water Board adopted Resolution No. 05-01-211 authorizing the Executive Officer to enter into a memorandum of understanding (MOU) with the Forest Service, to eliminate gray water discharges from houseboats to Shasta Lake after 6 September 2006. In January 2004, the Executive Officer and Forest Supervisor signed MOU No. 04-MU-11051458-004.
- 8. Gray water is defined in MOU No. 04-MU-1151458-004 as water generated from showers, kitchen sinks, bathroom sinks, wet bars, dishwashers, and washing machines.
- 9. On 28 February 2006, Regional Water Board staff approved the Discharger's proposal to expand the current wastewater disposal system. The proposed septic system is designed to treat and dispose up to a maximum of 22,000 gallons of wastewater per day from the marina, cabins, lodge, employee residence, and future cabins. The treatment system will consist of two 12,000-gallon septic tanks, one 10,000-gallon surge tank with dual pumps, two 8,000-gallon dosing tanks, and 4,800 feet of infiltration chambers covering approximately 1 acre, as shown on Attachment B, which is incorporated herein and made part of this Order. The leachfield/infiltration gallery will be separated into two zones, A and B, designed to accommodate varying percolation rates in the disposal area. An area near zones A and B has been reserved in the event that one zone is in need of replacement or repair (Zone C).
- 10. The Discharger operates 15 commercial houseboats. Several of the commercial houseboats are equipped with hot tubs. The hot tub wastewater, toilet (black) water, and gray water from commercial and private boats are removed through the marina's sewage pump-out system.
- 11. Wastes may also be discharged to Shasta Lake as a result of marina operations such as the refueling of vessels, storage of fuel, storage of chemicals, and maintenance of the facilities (including cleaning, washing, and refurbishing of rental houseboats). During the cleaning process, the Discharger uses water and a dilute solution of cleaning agent. Wastewater from houseboat cleaning is directly discharged to Shasta Lake.
- 12. Gasoline is stored in three 2,000-gallon above ground tanks, and is delivered to the marina dock dispensers through a system of underground and above ground piping. When the marina relocates during low water conditions, gasoline is delivered to the marina dock from a trailer-mounted aboveground storage tank.

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13. Storm water from the facility discharges to Shasta Lake and is regulated under the General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (WDID# 5R45I013432).

DESCRIPTION OF THE SITE

- 14. Antlers lies within the Shasta Dam Hydrologic Unit (506), Shasta Lake Hydrologic Area (506.10) Calwater 2.1. The underlying soil in the disposal area consists of well-graded, weathered volcanic soil to 8 feet below ground surface. Percolation test results for Field A were between 21 and 42 minutes per inch, and between 7.8 and 14.7 minutes per inch for Field B.
- 15. The average annual rainfall is approximately 60 inches and the average annual evaporation rate is approximately 70 inches (Shasta Dam Station, U.S. Bureau of Reclamation). The 100-year, 24-hour rain event is estimated to be 11.65 inches (Department of Water Resources).
- 16. The site geology is composed of extensively fractured and folded basalt, which is then underlain by thin bedded shale, sandstone, and conglomerate. The formation predominantly consists of shale with thinner layers of sandstone, 2 to 10 feet thick. Conglomerate layers are usually less than 10 feet thick.
- 17. Two water wells are located approximately 1,000 feet northwest of the disposal site. Groundwater typically fluctuates between 80 and 90 feet below ground surface (1,020 to 1,010 feet MSL) in both wells.

CEQA AND OTHER CONSIDERATIONS

- 18. Regional Water Board staff received a letter dated, 26 May 2006, stating that the Forest Service had completed the Environmental Assessment (EA) for the Gray Water Leach Systems Project and, the Forest Service Supervisor signed a Decision Notice/Finding of No Significant Impact for the project. The EA and Finding of No Significant Impact comply with Title 14, California Code of Regulations (CCR), Chapter 3, Section 15221.
- 19. The action to revise waste discharge requirements for ongoing operations at Antlers is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.).
- 20. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, (Basin Plan) designates beneficial uses, establishes water quality objectives and contains implementation plans and policies adopted by the State Water Resources Control Board. Pursuant to California Water Code Section 13263(a), waste discharge requirements must implement the Basin Plan.

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- 21. Surface water drainage is to Shasta Lake, a tributary of the Sacramento River. The Basin Plan designates the beneficial uses of Shasta Lake as municipal and domestic supply; agricultural supply; industrial supply; hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; spawning reproduction and/or early development; wildlife habitat; and navigation.
- 22. The Basin Plan designates the beneficial uses of underlying groundwater as municipal and domestic supply; agricultural supply; industrial service supply; and industrial process supply.
- 23. The Basin Plan establishes numerical and narrative water quality objectives for surface water and groundwater within the basin. Water quality objectives are the limits or levels of water quality constituents established for reasonable protection of beneficial uses of water or the prevention of nuisances.
- 24. State Water Resources Control Board Resolution No. 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters of the State (Antidegradation Policy), requires the Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Water Board policies.
- 25. A groundwater detection monitoring system is required to determine compliance with Resolution 68-16. This Order includes a time schedule for installing monitoring wells and a groundwater monitoring program to assure protection of beneficial uses of waters of the state.
- 26. The local economy is sustained substantially by recreational activities on Shasta Lake; therefore continued operation of the marina is important to the economic vitality of the region. Prior to implementation of MOU No. 04-MU-1151458-004, gray water was directly discharged to surface waters (Shasta Lake). Removing the direct discharge of waste to surface waters and discharging the waste to a disposal field will result in additional treatment, which otherwise would not have occurred, thus providing greater protection to waters of the state and benefiting the people of California.
- 27. California Water Code Section 13267 states, in part, that:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the qualities of the waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports SHASTA COUNTY

which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

28. The Monitoring and Reporting Program required by this Order is necessary to assure compliance with these waste discharge requirements.

PROCEDURAL REQUIREMENTS

- 29. The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe revised waste discharge requirements for the discharges of waste to land, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 30. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the revision of Waste Discharge Requirements.
- 31. Any person adversely affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review the action in accordance with Sections 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Board Office of Chief Council, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date the action was taken. Copies of the law and regulations applicable to the filing of a petition are available on the Internet at http://www.waterboards.ca.gov/water_laws/index.html and will be provided upon request.

IT IS HEREBY ORDERED, pursuant to Sections 13263 and 13267 of the California Water Code, that Order No. 97-255 is rescinded, and that Antlers Resort and Marina Incorporated and the U.S. Department of Agriculture Forest Service, their agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

- The discharge of waste classified as 'hazardous', as defined in Section 2521(a) of Title 23, CCR, Section 2510, et seq., (hereafter Chapter 15), or 'designated' as defined in Section 13173 of the California Water Code, is prohibited.
- 2. The discharge of waste from hot tub treatment or use to surface waters or surface water drainage courses is prohibited.
- 3. The by-pass or overflow of untreated or partially treated wastewater from the sewage disposal system is prohibited.

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- 4. The discharge of sewage, including gray water, from houseboats to surface waters is prohibited.
- The discharge of solid or liquid waste or pollutants, including solvents, oil, grease, or other petroleum products, to surface water, or surface water drainage courses is prohibited.

B. Discharge Specifications

- 1. Neither the treatment nor the discharge of waste shall cause a nuisance or conditions of pollution as defined by the California Water Code, Section 13050.
- 2. The domestic wastewater discharged from the marina to the leachfield shall not exceed 22,000 gallons per day.
- 3. The discharge shall not cause degradation of any water supply.
- 4. The discharge shall remain within the designated disposal area at all times.
- 5. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 6. Objectionable odors originating at the facility shall be investigated, and controlled. Failing treatment system components shall be repaired.
- 7. Solid waste shall be properly contained to prevent waste or leachate from entering surface waters.
- 8. Deodorizing chemicals and chemicals used for houseboat and facility maintenance shall be stored in containers designed to prevent discharges to groundwater, surface water, or surface water drainage courses.

C. Groundwater Limitations

1. The discharge shall not cause contamination of underlying groundwater nor cause underlying groundwater to contain waste constituents that are significantly greater, statistically, than background water quality.

D. Provisions

The Discharger shall comply with Monitoring and Reporting Program
 No. R5-2008-_____, which is part of this Order, and any revisions thereto as
 ordered by the Executive Officer.

- The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (Standard Provisions)," dated 1 March 1991, which are part of this Order.
- The Discharger shall dispose of sludges and other solids removed from waste disposal systems in a manner that is consistent with Title 27, California Code of Regulations and approved by the Executive Officer.
- The Discharger shall comply with the standards contained in Title 23, California Code of Regulations, Division 3, Chapter 20, Sections 2815 through 2829, Standards for the Removal of Sewage from Vessels.
- The Discharger shall report to the Regional Water Board any material change or proposed change in character, location, or volume of the discharge or chemical or cleaning agents used.
- 6. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Regional Water Board.
- 7. The Discharger shall notify the Regional Water Board by telephone immediately upon having knowledge of a discharge of hazardous or designated waste to surface waters, or surfacing effluent from the septic tank or leachfield areas.
- 8. The Forest Service as administrator of the property at which the discharge occurs, is ultimately responsible for ensuring compliance with these requirements. Antlers Resort and Marina Incorporated retains primary responsibility for compliance with these requirements, including day-to-day operations and monitoring. Enforcement actions will be taken against the Forest Service only in the event that enforcement actions against Antlers Resort and Marina Incorporated are ineffective or would be futile.
- A copy of this Order and its attachments shall be maintained at Antlers Resort and Marina Incorporated, Antlers Resort and Marina, and the Shasta-Trinity National Recreation Area, Shasta Lake Ranger Station, for reference by key operating personnel.
- 10. The Regional Water Board will review this Order periodically and revise requirements when necessary.

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11. The Discharger shall install a groundwater detection monitoring system for the wastewater treatment and disposal system in accordance with the following time schedule:

Compliance Date Task Submit a work plan for installation a. of a groundwater monitoring system adjacent to the wastewater 1 January 2009 treatment and disposal system. b. Submit groundwater monitoring 1 July 2009 system installation report. I PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on 2008. PAMELA C. CREEDON, Executive Officer